

KUBYSHIN, B.Ye., kand. tekhn. nauk; BYKOV, L.N., inzh.; PAVLOV, L.L., inzh.

Universal electromagnetic attachment for measuring rectified d.c.  
during reversing operations. Energ. i elektrotekh. prom. no.1:38-  
40 Ja-Mr '65. (MIRA 18:5)

BYKOV, L.T.; MALOZEMOV, V.V.

Some regularities in temperature distribution in limited  
volumes with internal heat release. Inzh.-fiz. zhur. 8  
no.2:204-207 F '65. (MIRA 18:5)

1. Aviatsionnyy institut imeni Ordzhonikidze, Moskva.

BYKOV, I.T.

Evaluating the speed of air currents caused by natural convection  
in a limited volume. Inzh.-fiz. zhur. 8 no.2:208-210 F '65.

(MIRA 18:5)

1. Aviatsionnyy institut imeni Ordzhonikidze, Moskva.

BYKOV, L.N. prof.

Law of the distribution of initial pressure in seams of a rock series and some practical conclusions from it. Izv. vys. ucheb. zav.; gor. zhur. 7 no.5:74-80 '64. (MIRA 17:12)

1. Tul'skiy politekhnicheskiy institut. Rekomendovana kafedroy rudnichnoy ventilyatsii.

BYKOV, L.N., inzh.; ZGURSKIY, V.A., inzh.; ZAL'TSMAN, L.G., inzh.;  
CHERNAYA, S.M., inzh.

Using the BRT-200M current reverser in silver plating.  
Mashinostroenie no.3:81-83 My-Je '65. (MIRA 19:6)

30448  
S/119/61/000/012/005/006  
D209/D303

9,2/40 (1001, 1150, 1161)

AUTHOR: Bykov, L.N., Engineer

TITLE: Magnetic time-relay

PERIODICAL: Priborostroyeniye, no. 12, 1961, 20-21

TEXT: The author describes a time-relay utilizing one magnetic amplifier with a capacitor in the control circuit Fig. 1. It has a working winding ( $w_1$ ), bias winding ( $w_c$ ) negative feedback winding ( $w_{oc}$ ), control winding ( $w_y$ ) and a winding  $w_c$ . The ampere-turns of the charging current ( $I_c w_c$ ) oppose the ampere turns of the control current ( $I_y w_y$ ). The germanium diode B accelerates release process of the relay. The relay operates as soon as the  $I_y w_y$  ampere turns exceed the  $I_c w_c$  ampere turns by the value  $I_{cp} w_y$ , where  $I_{cp}$  - operating current. The holding time of the relay can be controlled by changing the number of turns, varying C

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S/119/61/000/012/005/006

D209/D303

Magnetic time-relay

and R. The stability of operation is achieved by using the automatic bias and a non-linear resistance. Experiments were carried out with a time-relay utilizing permalloy toroidal cores (35 mm outside dia. 25 mm internal dia. 5 mm thick). The holding time was controlled between 1 and 60 seconds. This magnetic time-relay can be used in various industrial process control circuits. The relay circuit can be used in the program control. This relay was granted a patent No. 574349, 1.6. 1957. There are 3 figures and 3 Soviet-bloc references.

Card 2/8 *Ar*

SOV-98-58-2-7/21

AUTHORS: Bykov, L.S., and Assanov, V.V. Engineers

TITLE: Experience in Using Wooden Pipelines of Large Diameter (Opyt ekspluatatsii derevyannykh truboprovodov bol'shogo diametra)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 2, pp 28-30 (USSR)

ABSTRACT: Two wooden pressure conduits with an inside diameter of 5.4 m and 182 m in length have been in operation for 20 years at the Skhodnenskaya GES. The pipelines, of continuous type, consist of pine staves with a groove at one and a flange at the other end. The author gives a detailed description of the construction. He also gives information on the work process, the direction in which the pipelines are laid, imperfections in the construction of end connections (causing leakage), and on the maintenance of the pipelines. Yearly expenses for repairs and preventive maintenance amount to 4,800 rubles, while total exploitation expenses are 14,100

Card 1/2



SOV-98-58-2-7/21

Experience in Using Wooden Pipelines of Large Diameter

rubles (equal to 1.7% of the pipelines original cost as against 8% on metal pipelines).  
There is 1 photo and 1 table.

1. Pipeline--Construction    2. Pipelines--Costs    3. Wood  
--Applications

Card 2/2

BYKOV, I.S.

Twenty-five years of operation of the Moscow Canal. Gidr.stroi.  
32 no.7:4-9 J1 '62. (MIRA 15:7)

1. Glavnyy inzhener kanala imeni Moskvyy.  
(Moscow Canal)

BYKOV, L.S.; DYMENT, I.N.

The Moscow Canal. Gor.khoz.Mosk. 36 no.8:34-37 Ag '62.

(MIRA 16:1)

1. Glavnyy inzh. Upravleniya kanala imeni Moskvyy (for Bykov).
2. Glavnyy gidrolog Upravleniya kanala imeni Moskvyy (for Dymen).  
(Moscow Canal)

KUCHAROV, P.M.; BYKOV, L.T.; KARPUZIDI, K.S.; MERLIN, V.M.; KUNITSA, N.K.;  
KAL'YANOVA, M.L.; PARSHIN, M.I.

Experience with the prevention of tularemia during an extensive epizootic outbreak in rodents. Zhur. mikrobiol. epid. i immun. 29 no.8:3-7 Aug '58.  
(MIRA 11:10)

1. Iz Ural'skoy protivochumnyy stantsii i Rostovskogo protivochumnogo instituta.

(TULAREMIA, prevention and control,  
during extensive epizootic outbreak in rodents (Rus))

NEL'ZINA, Ye.N.; PYLENKO, M.S.; CHUDOSEVA, V.P.; KONDRASHKINA, K.I.;  
BYKOV, L.T.

Materials on the role of *Rhipicephalus schulzei* Ol. (Ixodides,  
Parasitiformes) in natural foci of plague. Part.1: Localization  
of the plague microbe in the tick body. Med.paraz.i paraz.bol.  
29 no.2:202-207 '60. (MIRA 13:12)  
(PASTEURILLA PESTIS) (TICKS AS CARRIERS OF DISEASE)

BYKOV, L.T.

Course of infective processes in laboratory animals (guinea pigs and white mice) in experimental plague. Zhur.mikrobiol.epid.i immun. 31 no.9:57-61 S '60. (MIRA 13:11)

1. Iz Ural'skoy protivochumnoy startsii.  
(PLAGUE)

BYKOV, L.T.

Accelerated bacteriological diagnosis of tularemia. Lab.delo  
7 no.11:7-9 N '61. (MIRA 14:10)

1. Ural'skaya protivochumnaya stantsiya.  
(TULAREMIA---DIAGNOSIS)

BYKOV, L.T.

Vibrio flora of the Ural River and its channels. Zhur.mikrobiol.  
epid.i immun. 33 no.5:118-119 My '62. (MIRA 15:8)

1. Iz Ural'skoy protivochumnoy stantsii.  
(VIBRIO) (URAL RIVER--WATER--MICROBIOLOGY)



BYKOV, L.T.; BELKINA, N.B.

Obtaining a batch of fleas from the burrows of gerbils during an inspection for plague in the sands of the northern Caspian Sea region; an author's abstract. Med. paraz. i paraz. bol. 33 no.5: 621 S-O '64. (MIRA 18:4)

1. Ural'skaya protivochumnaya stantsiya.

PHASE I BOOK EXPLOITATION

757

Bykov, Leonid Tikhonovich; Yegorov, Mikhail Spiridonovich, and Tarasov, Pavel Vasil'yevich

Vysotnoye oborudovaniye samoletov (High-altitude Aircraft Equipment) Moscow, Oborongiz, 1958. 392 p. 7,000 copies printed.

Reviewer: Grishanov, N. G., Engineer-Colonel, Candidate of Technical Sciences; Ed.: Petrova, I. A.; Tech. Ed.: Rozhin, V. P.; Managing Ed.: Sokolov, A. I.

PURPOSE: This is a textbook approved by the Ministry of Higher Education of the USSR for the course "High-altitude Aircraft Equipment" at VTuzes. It may also be useful to engineers and scientific workers specializing in that field.

COVERAGE: The book describes the principles of construction, basic theories, and engineering design methods for the apparatus used in pressurized aircraft cabins and for oxygen equipment and presents also brief data on the physiology of high-altitude flight. The book mentions designers who made important contributions to the development of pressurized cabins and oxygen equipment, including V. A. Chizhevskiy (1931), A. Ya. Shcherbakov (1934-36), V. K. Gribovskiy (1936),

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High-altitude Aircraft Equipment

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N. N. Polikarpov, M. N. Petrov, V. M. Petlyakov (1939, 1942), V. M. Myasishchev (1939-45), etc. The authors express their gratitude to Engineer P. I. Zhitenev for his aid with section 5.4 to Chapter V. There are 10 Soviet references.

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References

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AVAILABLE: Library of Congress

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IS/flc  
11-24-58

BYKOV, Leonid Tikhonovich

High Altitude Aircraft Equipment, by L.T. Bykov,  
M.S. Yegorov and P.V. Tarasov. New York, London, Per-  
gamon Press, 1961.

xv, 430 p. illus., diags., graphs, tables.

Translated from the original Russian: Vysotnoye  
Oborudovaniye Samoletov, Mosclw, 1958.

References: p. 430.

26.2190

AUTHOR: Bykov, L.T.

34277  
S/535/61/000/143/003/006  
D033/D112

TITLE: Approximate determination of the cross section area of the emergency depressurizing valve

SOURCE: Moscow. Aviatsionnyy institut. Trudy, no. 143, 1961.  
Issledovaniye nekotorykh elementov gidropnevmaticheskogo oborudovaniya samoletov, pp 71-81.

TEXT: The author proposes new formulae for correctly calculating the optimum cross section area of the emergency depressurizing valve in aircraft. Depressurization must be executed within 2 or 3 seconds in light aircraft and within 6 to 12 seconds in heavy aircraft. Unlike the previous formulae, the new ones take into account the compressibility of the air and the fact that the temperature within the cabin does not remain constant during depressurization. The new formulae read as follows: ✓

$$F = \frac{V_c}{\tau_{\text{isoth}}^{\text{tot}} \sqrt{R T_{c0}}} \left[ \frac{1}{2.15} \ln \left( \frac{P_{c0}}{1.89 P_h} \right) + 0.435 \right], \quad (28)$$

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Approximate determination ...

34277  
S/535/61/000/143/003/006  
D033/D112

This formula is valid in case isothermic air expansion takes place in the cabin.

$$F = 2.65 \frac{V_c}{\tau_{\text{tot}}^{\text{adiab}} \sqrt{R T_{c0}}} \left( \frac{p_{c0}}{p_h} \right)^{\frac{1}{\gamma}} \quad (29)$$

This formula is valid in case adiabatic air expansion takes place in the cabin. In both formulae:  $F$  - cross section of the emergency depressurization valve;  $V_c$  - volume of the cabin;  $\tau_{\text{tot}}$  - total discharge time of the air from the cabin, including the pre- and post-critical discharge periods;  $\mu$  - air discharge coefficient;  $R$  - gas constant;  $T_{c0}$  - cabin air temperature at the start of depressurization;  $n$  - index of polytropy, variable between 1 and 1.4 (the latter is recommended for practical use);  $p_{c0}$  - cabin air pressure at the start of depressurization;  $p_h$  - atmospheric pressure. Engineer P.V. Tarasov is mentioned for his contribution in this field. There are: 1 figure, 2 tables and 4 Soviet-bloc references. ✓

Card 2/2

L 43112-65 EMT(1)/EPF(o)/EPF(n)-2/ENG(m)/EPR, Tr-4/PS-4/Pu-4 WJ  
 ACCESSION NR: AP5006228 S/0170/65/008/002/0204/0207  
 41  
 40

AUTHOR: Bykov, L. T.; Malozemov, V. V.

TITLE: Certain relationships of temperature distribution in bounded spaces with internal heat release

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 2, 1965, 204-207

TOPIC TAGS: heat convection, heat transfer, <sup>21</sup>heat exchange, interferometry, natural heat convection

ABSTRACT: The paper deals with an experimental technique for natural convection in small bounded spaces using air models and the optical method. The results of an experimental study of the temperature fields in a two-dimensional limited space with natural convection using an IZK-454 interferometer are given. The expression

$$\theta = A(\eta^m),$$

can be used to determine relative air temperature. According to the results for one of the models, the index  $m$  has an average value of  $1/3$ . Numerical values of  $A$  and  $n$  are found graphically to be 0.45 and 0.5, respectively. Curves are given for the

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L 43112-65

ACCESSION NR: AP5006228

temperature-height relationship of the model, and the temperature variation in a horizontal section. Orig. art. has: 3 figures, 2 formulas.

ASSOCIATION: Aviatzionnyy institut imeni Sergo Ordzhonikidze, Moscow (Aviation Institute)

SUBMITTED: 13May64

ENCL: 00

SUB CODE: TD

NO REF SOV: 006

OTHER: 000

Card 2/2

L 43113-65 EMT(1)/SEC(k)-2-1JP(c) WH  
ACCESSION NR: AP5006229

S/0170/65/008/002/0208/0210

AUTHOR: Bykov, L. I.

TITLE: Estimating the velocity of air in a bounded space with natural convection

SOURCE: Inzhenerno-fizicheskii zhurnal, v. 8, no. 2, 1965, 208-210

TOPIC TAGS: air flow velocity measurement, vertical air convection current, interferometry

ABSTRACT: A method of determining the velocity of natural convection vertical air currents in a limited space with internal heat sources, making use of experimental data obtained with an interferometer, is discussed. Working formulas are presented. The formula

$$v_z = a \left[ \frac{\lg \theta - \lg(A \zeta^m)}{\lg \eta} - 1 \right] \frac{1}{h_i - h_s}$$

expresses the vertical component of air velocity, where  $a$  is the coefficient of thermal conductivity;

$\theta = (T - T_w)/(T_s - T_w)$  is the relative temperature ( $T$ --air temperature of the investigated point;  $T_w$ --wall temperature;  $T_s$ --heat source surface temperature);  $\zeta = N_z/N_{\max}$  is the relative power of thermal source;  $\eta = (h_i - h_s)/(h_{i0} - h_{s0})$  is the relative height of

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L 43113-65

ACCESSION NR: AP5006229

the investigated point;  $A$ ,  $m$  and  $n$  are empirical constants. Analysis of the experimental results, and comparison of test data with the curve obtained from this formula indicate that it is valid only within definite limits, excluding the source boundary layer zone and the near-wall boundary layer of the enclosing structure. Orig. art. has: 12 formulas.

ASSOCIATION: Aviatsionnyy institut imeni Sergo Ordzhonikidze Moscow (Aviation Institute)

SUBMITTED: 13May64

INCL: 00

SUB CODE: TD, ME

NO REF SOV: 002

OTHER: 000

*me*  
Card 2/2

BYKOV, M. (Riga)

There was no way out. Pozh.delo 9 no.12:28 D '63.

(MIRA 17:1)

1. BAKOV, M., MAKSIMOV, L.
2. USS<sup>a</sup> (600)
4. Machinery, Automatic
7. Automatic machine of the Kurochkin family. Tekh. molod. 20 no. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Uncl.

KALINICHENKO, V., inzh.; BYKOV, M., inzh.; SHITOMAN, Ye., inzh.

Apartment houses with hot-air radiant heating systems. Zhil. stroi.  
no.11:9-12 N '60. (MIRA 13:11)

(Radiant heating)



BYKOV, M., inzh.

Efficient insulation for livestock buildings. Sel'. stroi. 13  
no.10:24-25 0 '58. (MIRA 11:10)  
(Farm buildings) (Insulation (Heat))

BYKOV, M., inzh.

Improve the construction of livestock buildings. Nauka i pered.  
op. v sel'khoz. 9 no.2:46-48 F '59. (MIRA 12:3)  
(Farm buildings)

BYKOV, M.A., glavnyy spetsialist

Improving climate in livestock barns. Zhivotnovodstvo 21 no.2:84-87  
F '59. (MIRA 12:3)

1. Tekhnicheskiy otdel Giprosel'khov.  
(Stables) (Insulation (Heat))

ARKHANGEL'SKIY, P.Ye.; BERNSETEYN, A.M.; BYKOV, M.A.; DLUGACH, M.L.;  
IL'YASHEVSKIY, Ya.A.; KIRILLOV, A.A.; KOZLOVSKIY, A.S.; KRYLOV,  
N.V.; LESOV, N.M.; MARTYNOV, P.T.; NIKANDROV, B.I.; PARUNIN,  
V.Ye.; RUDANOV, M.L.; SINYAKOV, V.K.; PAL'KNER, O.G.; PETRYAKOV,  
A.I., red.; BALLOD, A.I., tekhn.red.

[Manual on the construction of farm buildings] Spravochnik po  
sel'skokhoziaistvennomu stroitel'stvu. Moskva, Gos.izd-vo  
sel'khoz.lit-ry, 1960. 704 p.

(Farm buildings)

(MIRA 13:12)

BYKOV, M.A.

Bykov, M.A. "The role of reservoir water supplies in the epidemiology of intestinal infections"  
Zdravookraneniye Kazakhstana, 1948, No. 8, p. 28-30.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

BYKOV, M. A.

24222 BYKOV, M. A. K zagryazneniyu atmosfernogo vozdukha svintson. Zdravookhraneniye  
Kazakhstana, 1949, No. 3, S. 34-35.

SO: Letopis, No. 32, 1949.

BYKOV, M. A.

Mbr., Sanitation & Bacteriological Lab., Chinkent, -c1949-.

"Hygienic Evaluation of Tar Coverings on Vegetable Sheds," Gig. i San.,  
No. 8, 1949.

BYKOV M. A.

PA 151T74

USSR/Medicine - Reservoir Water Fever      Nov 49  
Sanitation

"Reservoir Water Fever in Southern Kazakhstan and Its Prophylaxis," M. A. Bykov, Sanitation and Bacteriol Lab, Chirchikent, 1 p

"Gig 1 Sap" No 11

Outbreaks of water fever in areas of southern Kazakhstan with extensive irrigation systems, especially in cotton-growing sections, were erroneously attributed to gripe, mosquito fever, and alimentary toxemia. People from kolhozoes and settlements drew their water supply from open reservoirs.

USSR/Medicine - Reservoir Water Fever      151T74  
(Contd)      Nov 49

Field workers were served by water carts. Chlorination stopped the outbreaks. Remedy is construction of wells supplied with filters and artesian wells.

151T74



BYKOV, M. A.

"Water Supply from Reservoirs and Typhoid Fever," Gig. i San., No.6, 1952

BYKOV, Mikhail Aleksandrovich, kand. tekhn. nauk; USHKOV, F.V.,  
kand. tekhn. nauk, nauchn. red.

[Calculation of temperature and humidity conditions of  
livestock barns] Raschet temeperaturno-vlazhnostnogo re-  
zhima zhivotnovodcheskikh zdani. Moskva, Stroiizdat,  
1965. 139 p. (MIRA 18:7)

BYKOV, M. A.

PA 153T53

USSR/Engineering - Resistors

Oct 49

Equipment, Measuring

"A Series of Standard Nonreactive Resistance Coils,"  
M. A Bykov, Cand Tech Sci, 3 1/2 pp

"Vest Elektro-Prom" Vol XX, No 10

Production-experimental workshops of Moscow Power  
Eng Inst designed and are producing a series of  
standard, nonreactive resistance coils ranging from  
0.1 to 100,000 ohms. Describes construction of  
coils in detail. Includes table and five photo-  
graphs.

153T53

BYKOV, M. A.

"A New Form of the Full Equation for the Double Bridge and its Application,"  
Elektrichestvo, No. 8, 1949.

Cand. of Tech. Sci., Moscow State Insts. of Measurements & Measuring Apparatus  
Appliances., -c1949-.

621.317.733.083  
 8051. The "balancing minimum" in balancing a.c. bridges with a poor convergence. M. A. Bykov. *Elektrichestvo*, 1954, No. 6, 35-8. In Russian.  
 It is shown that it is possible to derive an approximate theory of the balancing of badly converging a.c. bridges and that during the successive stages of this process deceptive "quasi-minima" of the indicating device may be observed which are relatively far from the correct "balancing" minimum. The theory enables the amount of the errors to be approximately assessed. However, determination of these errors is far too laborious to be practical, the conclusion being therefore that bridges with poor convergence should not be used at all. If this cannot be avoided, the balancing process must be continued until the range of the optimum values of the controllable required parameter is smaller by a factor 5-10 than the permissible error in the determination of this parameter.  
 B. P. KRAUS

BYKOV, M.A.

A special method of balancing a.c. bridges. Izv.tekh.no.4:27-30  
J1-Ag '55.

(Electric measurements)

(MIRA 8:10)

BYKOV, M.A.

Category : USSR/General Problems - Method and Technique of Investigation

A-4

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 2892

Author : Bykov, M.A.

Title : Modification of the Anderson Bridge to Permit Direct Reading of Inductance

Orig Pub : Izmerit. tekhnika, 1956, No 3, 49-51

Abstract : Description of a modification of the Anderson bridge circuit, permitting a direct reading of the inductance and of the ohmic resistance of a coil. The circuit described gives ideal coincidence of the balancing process no matter how low the  $Q$  of the coil.

Card : 1/1

BYKOV, M.A.

USSR/General Section - Metrology. Laboratory Technique.

A-6

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8345

Author : M.A. Bykov

Inst :

Title : Preparation of International Standards for Electric-Measuring Instruments and Recording Meters.

Orig Pub : Izmpy. tekhnika, 1956, No 3, 87-88.

Abstract : It is reported that from 9 through 12 November 1955 there was held in Budapest the first conference of the Technical Committee No 3 of the International Electrical Commission, dealing with problems of international standardization in the field of electrical measuring indicating instrument and electric recording meters.

Card 1/1



BYKOV, M.A.

Electric screening and grounding of electric measuring instruments.  
Izv.tekh.no.6:88-92 E-D '56. (MLRA 10:1)  
(Electric instruments)

BYKOV, M.A.; TYURIN, N.I.

Conference on electric instrument design. Izv.tekh.no.6:97 E-D  
'56. (MIRA 10:1)  
(Kiev--Electric instruments--Congresses)

BYKOV, M.A., red.; KUZNETSOVA, M.I., red. izd-va; MATVEYEVA, A.Ye.,  
tekhn. red.

[Instructions 178-56 for checking capacitor boxes and fixed  
and variable capacitors] Instruktsiia 178-56 po poverke  
magazinov emkosti i kondensatorov postoiannoi i peremennoi  
emkosti. Izd. ofitsial'noe. Moskva, 1957. 12 p.

(MIRA 14:5)

1. Russia (1923- U.S.S.R.) Komitet standartov, mer i iz-  
meritel'nykh priborov.

(Electric capacitors--Testing)

BYKOV, M.A.

Final development of the international standard for electric meters  
of active energy. Izv. tekhn. no.3:92 My-Je '57. (MLRA 10:8)  
(Electric meters--Standards)

105-6-6/26

AUTHOR LEVIN, M. I., Doctor of Technical Sciences, Professor; BYKOV, M. A.,  
Candidate of Technical Sciences; TYURIN, N. I., Engineer.

TITLE Problems connected with the Standardization of Electric Measuring Devices.  
(Voprosy standartizatsii elektrofizmeritel'nykh priborov.-Russian)

PERIODICAL Elektrichestvo 1957, Nr 6, pp 21-24 (U.S.S.R.)

ABSTRACT The technical committee Nr 13 of the International Electro-technical  
Commission (IEC) recently worked out "recommendations" for acting  
energy counters and indicators. In November 1955 they were discussed  
at Budapest, but in view of the fact that a number of points were con-  
sidered to be unacceptable by the Soviet delegation, the "recommendations"  
of the conference were left to be dealt with by the technical experts  
who met in London in January 1956. In October 1956 two projects of the  
"recommendations" for electric acting energy counters of the class 2,0  
and for electric measuring and indicating devices were completed in London  
and in Naples. At present the definite texts are being worked out by the  
Hungarian National Committee and will enter into force after being  
approved by the member states. Some of the resolutions were made in form  
of compromises as e.g. those concerning the binding force of standards,  
terms of guarantee, etc. In the course of a short survey it is shown

CARD 1/2

CARD 2/2

Problems connected with the Standardization of Electric Measuring Devices. 105-6-6/26

to what extent these resolutions agree with or diverge from the present Soviet GOST standards. The next program of the Technical Committee Nr 3 will comprise the working out of recommendations concerning blind energy counters, recording and contact devices, as well as the beginning of work concerning standards for measuring transformers, already going on since 1930. A survey is given of the work carried out within the past 25 years. In July 1956 the project of "recommendations" for measuring transformers was worked out by the Committee Nr 38 formed especially for this purpose at Munich. It comprises three groups of "recommendations":

- 1) Measuring transformers.
- 2) Protective transformers.
- 3) Condenser-voltage transformers.

This recommendation is compared with present Soviet standards.  
(With 4 Slavic references)

ASSOCIATION: VNI of the Committee for Standards, Measures, and Measuring Devices.

PRESENTED BY:-

SUBMITTED: 10.4. 1957

AVAILABLE: Library of Congress.

Bykov, M. A.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215  
Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni  
D.I. Mendeleeva  
Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific  
Research Abstracts; Collection of Articles, Nr 2) Moscow,  
Standartgiz, 1958. 139 p. 1,000 copies printed.  
Additional Sponsoring Agency: USSR. Komitet standartov, mer i  
izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.  
PURPOSE: These reports are intended for scientists, researchers,  
and engineers engaged in developing standards, measures, and  
gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-  
ment and control. The reports were prepared by scientists of  
institutes of the Komitet standartov, mer i izmeritel'nykh  
priborov pri Sovete Ministrov SSSR (Commission on Standards,  
Measures, and Measuring Instruments under the USSR Council of  
Ministers). The participating institutes are: VNIIM -  
Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I.  
Mendeleeva (All-Union Scientific Metrology Institute of Met-  
rology imeni D.I. Mendeleeva) in Leningrad; Sverdlovsk branch  
of this institute; VNIK - Vsesoyuznyy nauchno-issledovatel'skiy  
institut komiteta standartov, mer i izmeritel'nykh priborov  
(All-Union Scientific Research Institute of the Commission  
on Standards, Measures, and Measuring Instruments) created  
from VNIIM, Moscow, and Gosudarstvennyy institut standartov  
i izmeritel'nykh priborov (Moscow State Institute of Measures  
and Measuring Instruments) October 1, 1955; VNIIFTRI -  
Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh  
i radiotekhnicheskikh izmereniy (All-Union Scientific  
Research Institute of Physical, Chemical, and Radio-engineering  
Measurements) in Moscow; ENOIMP - Kharkovskiy gosudarstvennyy  
institut mer i izmeritel'nykh priborov (Kharkov State Institute  
of Measures and Measuring Instruments); Khar'kovskiy gosudarstvennyy  
institut mer i izmeritel'nykh priborov (Kharkov State Institute  
of Measures and Measuring Instruments); Novosibirsk State Institute  
(Novosibirsk State Institute of Measures and Measuring Instru-  
ments). No personalities are mentioned. There are no references.

Electrio and Magnetic Measurements (Shramkov, Ye.D., Editor, Professor)  
Bykov, M.A. (VNIIM). Apparatus for Checking Standard Induct-  
ance Coils and Capacitors and for Measuring the Time Constant  
of Nonreactive Resistors for 400-500 Ohm 91

Bykov, M.A. (VNIIM). Apparatus for Measuring the Time Constant  
of Nonreactive Resistors for 0.001 to Several Ohms 93  
Gryzhol'skiy, A.L. (VNIIM). Developing a Standard Measuring  
Unit for Standard Capacitance Measures, and a Method for  
Checking and Measuring Capacitance from 1 to 50 pf at  
Frequencies up to 100 Megacycles, and up to 450 pf at Frequencies  
up to 50 Megacycles 95

Rudnyy, N.M., A.Z. Vekaler, A.A. Chukhlantsev, and R.G. Abel'm  
(VNIIM). Using a Single Bridge for Checking Shunts and Low-re-  
sistance Gages 96

Kaplik, M.Sh. (VNIIM). Apparatus for Checking Standard Ammeters  
Card 19/27

and Voltmeters at High Frequencies

SOV/110-59-1-26/28

AUTHOR: Bykov, M.A. (Candidate of Technical Sciences)

TITLE: The Stockholm Conference of the International Electrotechnical Commission (Stokgol'mskaya konferentsiya mezhdunarodnoy elektrotekhnicheskoy komissii)

PERIODICAL: Vestnik Elektromyshlennosti, 1959, Nr 1, pp 75-77 (USSR)

ABSTRACT: Increasing international trade in electrical products makes the work of the I.E.C. ever more important, particularly for the Soviet Union. The organisation of the I.E.C. is briefly described and the work of the Stockholm conference is reviewed with particular reference to technical committees 13 and 38. It is stated that important practical results were achieved at the meeting. The Soviet delegation played a useful part.

There are no figures, no references.

Card 1/1



8(1)

SOV/115-59 -2-24/38

AUTHOR: Bykov, M.A.

TITLE: A Negative Angle of Loss in a Tri-Electrode Condenser  
(Otritsatel'nyy ugol poter' u trekh-elektronnogo kondensatora)

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 2, pp 43-45  
(USSR)

ABSTRACT: The author states that the principle of building and utilizing a three electrode condenser with no loss in practice (angle of loss  $< 1.10^{-5}$ ) and in a very wide frequency range, has often been described. He then refers to attempts made by Austin and Curtis to resolve this problem (Physical Review, 1939, Vol 55, Nr 6) and comes to the same conclusions after examining its theoretical aspects, namely that while it is definitely possible theoretically to achieve the effect of a condenser with a negative angle of loss or an angle of loss equal to zero, in practice such an effect can be obtained only in rare cases. There are 3 circuit diagrams,

Card 1/2

25(5)

AUTHORS:

Bykov, M.A. and Volokhova, V.A.

SOV/115-59-4-16/27

TITLE:

Starting the Production of High-Voltage, Pressure-Type Measuring Capacitors (Ob organizatsii proizvodstva vysokovol'tnykh izmeritel'nykh kondensatorov s szhatym gazom)

PERIODICAL:

Izmeritel'naya tekhnika, 1959, Nr 4, p 30 (USSR)

ABSTRACT:

The Soviet electrical industry does not produce any pressure-type capacitors for high-voltage measurements. The high-voltage bridges MDP of the plant "Tochelektropribor" are equipped with air capacitors for 10 and 35 kv which is not advantageous. For higher voltages, the manufacture of air capacitors is practically impossible, since they will have too large dimensions. Using gas-filled, pressure-type capacitors, the dimensions of the equipment may be kept within reasonable limits. Pressure-type capacitors may be built for 100 kv and higher voltages. Therefore, the authors demand that the production of pressure-type capacitors be started. There is 1 Soviet reference.

Card 1/1

25(6)

AUTHOR: Bykov, M. A., Candidate of Technical Sciences

SOV/119-59-10-8/19

TITLE: On the Ratio 1:3 for Test Work

PERIODICAL: Priborostroyeniye, 1959, Nr 10, pp 16 - 17 (USSR)

ABSTRACT: The ratio of the grades of accuracy, which must be maintained between the grade of accuracy of calibrating instruments and that of the instruments to be calibrated, is investigated in the paper under review. The book "Osnovy metrologii" (Fundamentals of Metrology) by M. F. Malikov is mentioned, where a ratio of 1:3 is demanded. In this book, however, all systematic faults are considered, which according to the opinion of the author of this paper, impairs the results. The author states that the theory of the accumulation of accidental faults for indirect measurements applied by M. F. Malikov, must not be used in the case under review. It is shown further, that the zone of indetermination is far too great at a ratio 1:3. The relative value of these zones and the probability of the correctness of the error-values here determined, influence the reliability of

Card 1/2

On the Ratio 1:3 for Test Works

SOV/119-59-10-8/19

the results. Furthermore, the distribution of the errors in the test-instrument is of importance. A detailed observation of these circumstances reveals the obvious insufficiency of a ratio 1:3 of the grades of accuracy. The choice of the ratio between the grades of accuracy is considered an economic problem for the individual factory. The application of a correction in the test-instrument is mentioned further and its reliability is discussed. It is stated in conclusion, that one will probably have to calculate with a ratio 1:5 of the grades of accuracy, and that a greater ratio will lead to practical difficulties. There are 1 figure and 1 Soviet reference.

Card 2/2

BYKOV, Mikhail Aleksandrovich; GRATSIANSKIY, Igor' Nikolayevich; KIFER, Isaak Iosifovich; KUTYASHOVA, Yelena Mikhaylovna; LEVIN, Mark Iosifovich; PRYTKOV, Vladimir Tikhonovich; STREKALOV, Ivan Alekseyevich; TALITSKIY, Aleksandr Vasil'yevich; KHARCHENKO, Roman Romanovich; SHUMILOVSKIY, Nikolay Nikolayevich; KASATKIN, A.S., red.; VORONIN, K.P., tekhn.red.

[Course on electric measurements] Kurs elektricheskikh izmerenii.  
Pod red. V.T.Prytkova i A.V.Talitskogo. Moskva, Gos.energ.isd-vo.  
Pt.1. 1960. 479 p. Pt.2. 1960. 430 p. (MIRA 13:10)  
(Electric measurements)

BYKOV, M.A.

International conference of Technical Committee No.38 of the  
International Electric Engineering Commission. Izv.tekh. no.2:  
62-63 F '60. (MIRA 13:6)  
(Electric measurements--Congresses)

BYKOV, M.A.

Measuring device for checking inductance and capacitance  
reference standards with large nominal values. Trudy inst.  
Kom. stand., mer i izm. prib. no.52:88-105 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Komiteta  
standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov  
SSSR.

(Electric coils--Measurement)

(~~Electric capacitance--Measurement~~)

BYKOV, M. F.

"Determination of Systematic Errors in Observations of Stars of the Absolute Catalog of Right Ascensions," Tr. Tashkentsk. astronom. observ., 4, ser. 2, 1954, pp 53-101

An original method is presented for deriving accurate and approximate formulas relating the azimuth and the hour angle of a star with collimation, azimuth, inclination of rotational axis of the instrument, and latitude. (RZhAstr, No 4, 1955)

SO: Sum. No. 568, 6 Jul 55



BYKOV, M.F.; SHARIKOVA, V.P.; tekhn.red.

[Absolute catalog of right ascensions of 623 faint stars from,  
FKSZ] Absolutnyi katalog priamykh voskhozhdenii 623 slabykh  
svezd iz FKSZ. Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR, 1961.  
162 p. (MIRA 14:6)  
(Stars--Catalogs)

14(5)

SOV/92-58-8-8/36

AUTHORS: Gorokhov, N.S., Foreman and Bykov, ~~M.G.~~, Engineer

TITLE: Experimental Hydraulic Fracturing of a Formation Performed by the Bugul'manef't' Petroleum Production Administration (Opyt gidravlichesкого razryva plasta v NPU Bugul'manef't')

PERIODICAL: Neftyanik, 1958, Nr 8, pp 10-13 (USSR)

ABSTRACT: Hydraulic fracturing of a formation by a special crew attached to the department in charge of oil well overhauling. Before the hydraulic fracturing formation is begun, some preliminary work, such as additional flushing and perforation of the well, has to be completed. Moreover, a packer has to be lowered into the well through pressure pump tubes and has to be installed 7-10 m above the productive formation top; the hermetic sealing of the wellhead has to be checked. When all these operations are terminated, the special equipment shown in Fig. 1 is installed at the wellhead. Then pressure lines are tested once more to ascertain if they can stand a 300 atm pressure, valves are opened, and 15-20 cu m of crude oil or water are injected to fracture the formation.

Card 1/2

Experimental Hydraulic Fracturing (Cont.)

92-58-8-8/36

Sand is mixed with the fracturing fluid in a mixing tank and the percentage of sand in the mixture is controlled. Up to 5 tons of sand are gradually injected during this operation. The location of the formation ruptures is determined with the aid of the injected radioactive sand, activated coal or, other material saturated with isotopes. In Fig. 2 and 3 the author shows the gamma ray logging curves taken at two different wells after the operation. In Table 1 the author shows the results of hydraulic fracturing performed in 1957. Characteristics of the fracturing fluids are given in Table 2. The Bugul'maneft' Administration performed the hydraulic fracturing through the 6" pipe column under a high pressure (150-300 atm), but at a relatively low injection rate (880-1200 m<sup>3</sup> per day) as a precaution against a possible rupture of the casing pipes. This procedure offered a number of advantages. As a result of hydraulic fracturing, performed at the Romashkino field in 12 input wells and 32 production wells, an additional 350 tons of crude oil are recovered every day. There are 3 figures and 2 tables.

ASSOCIATION: NPU Bugul'maneft' (The Bugul'maneft' Petroleum Production Administration)

Card 2/2

BYKOV, M.I., inzhener; SMIRNOVA, A.V., inzhener.

                      
Cause of petroleum asphalt frothing during oxidation into bitumen.  
Neftianik 2 no.1:13-15 Ja '57. (MLRA 10:2)

1.Ukhminskiy neftepererabatyvayushchiy zavod.  
(Petroleum products)

67299

5.3831  
24(4), 24(6)

AUTHORS:

Bazhenov, N.M., Bykov, M.I.,  
Volkova, L.A., Vol'kenshteyn, M.V.

SOV/181-1 -8-4/32

TITLE:

Photoelastic Effect in Polymethylmethacrylate, Polybutylmethacrylate, and Polyvinylacetate

PERIODICAL:

Fizika tverdogo tela, 1959, Vol 1, Nr 8, pp 1179-1187 (USSR)

ABSTRACT:

The authors investigated the kinetics of the internal rotation in polymers by the method of photoelasticity which at the same time allowed measurement of birefringence and strain with a constant true stress on the sample. The authors were interested in the relaxation phenomena in organic glasses. M.N. Zhurina and O.N. Trapeznikova (Ref 1) had obtained important data on internal rotation. In the present work two types of polymethylmethacrylate differing in their way of production and in their temperature of vitrification. The photoelastic effect was investigated in a wide range of deformations and temperatures by means of a device described already earlier (Ref 4). The most important results which are given in several diagrams are the increase of negative birefringence during cooling and its decrease and transition to positive values when the polymethylmethacrylate samples are heated. Both polymethylmethacrylate

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Photoelastic Effect in Polymethylmethacrylate,  
Polybutylmethacrylate, and Polyvinylacetate

SOV/161-1 -8-4/32

types have a hysteresis with an extraordinary course, namely, counterclockwise. In the case of repeated passing of the heating and cooling cycles in one and the same polymer sample the same hysteresis loops are obtained. A stronger strain of the polymer sample renders temperature dependence more stringent. The photoelastic effect  $\Delta\epsilon$  reaches saturation already with relatively small deformations. In the case of heating and strain of the stretched polyvinylacetate film birefringence depends only slightly on temperature, which holds also in the stretching of polybutylmethacrylate films. When the stretched polybutylmethacrylate films are heated or cooled, a temperature dependence of birefringence in the case of fixed final expansion was not observed. The birefringence hysteresis of polymethylmethacrylate observed in heating and subsequent cooling is indicative of a non-uniform relaxation behavior of the polymer under the present experimental conditions. The elementary theory of birefringence relaxation is based on a kinetic equation. Polymethylmethacrylate anisotropy is obviously caused only by anisotropy of the lateral  $\text{COOCH}_3$  and  $\text{CH}_3$  groups.  $\text{CH}_3$  groups

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Photoelastic Effect in Polymethylmethacrylate,  
Polybutylmethacrylate, and Polyvinylacetate

SOV/181-1 -8-4/32

obviously cause positive birefringence. Negative birefringence is caused by the highly isotropic double bond C=O which lies in the plane perpendicular to the strain plane of the chain. Besides, negative birefringence of polyvinylacetate is determined only by the carbonyl group. The "anomalous" hysteresis found in polymethylmethacrylate is caused by the existence of two relaxation mechanisms with highly differing relaxation times. These mechanisms are related with the structure of the polymethylmethacrylate chain. The polymethylmethacrylate sample with higher vitrification temperature shows a shift of the temperature course of birefringence toward higher temperatures. The absence of hysteresis phenomena in polybutylmethacrylate and polyvinylacetate may be explained by the structure of these polymers. There are 14 figures, 1 table, and 6 Soviet references

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy, AN SSSR, Leningrad  
(Institute of High-molecular Compounds of the AS USSR, Leningrad)

SUBMITTED: August 1, 1958

Card 3/3

BYKOV, M. M.

Lumbering

Mean progressive norms of output ("Instructions for establishing a plan of production organization in lumber mills." Reviewed by M. M. Bykov.) Les. prom 12 no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September<sup>2</sup> 1953, Uncl.



BYKOV, Mikhail Mikhaylovich; SECHEDRIN, B.Ye., red.; LYAKHOVICH, E.A.,  
red.izd-va; PROKOF'YEVA, L.N., tekhn.red.

[Study of the utilization of machinery and equipment in  
lumbering enterprises] Analiz ispol'zovaniia mashin i mekha-  
nizmov v lesozagotovitel'nykh predpriatiakh. Moskva, Gos-  
lesbumizdat, 1959. 62 p. (MIRA 12:12)  
(Lumbering--Machinery)

USSR/Cultivated Plants - Grains.

M-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29681

Author : Bykov, M.M., Dapina, S.Ya.

Inst : Voronezh Agricultural Institute.

Title : The Effect of Micro-and Macrotraces of Salt Solutions  
on Summer Wheat Seed Productive Qualities and Plant Growth  
and Development.

Orig Pub : Dokl. VASKhNIL, 1956, No 11, 12-16.

Abstract : In experiments of the Voronezh Agricultural Academy summer  
wheat seeds were soaked for 24 hours at 18° in solutions  
of ammonium decaborate (0.02%), potassium and sodium ter-  
tiary phosphates (1%), manganese sulfate (0.02%) and col-  
balt chloride (0.002%). The seeds were treated for 7 days  
before sowing and dried to an air-dried state. Throughout  
the course of the vegetation period better plant growth

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- 21 -

BYKOV, M.M.																									
COMMON ELEMENTS													PROCESSING AND PROPERTIES INDEX												
<p>The solubility of gases in solutions of salts under pressure at high temperatures. M. M. Bykov. <i>Acta Univ. Tomographica</i>, No. 3, 20 (1961) (German 37) (1967). The soly. of air, O<sub>2</sub>, N<sub>2</sub> and H<sub>2</sub> was studied at 100 kg./sq. cm. and 0-240° in 0.5, 1.0 and 2.0 N KCl solns. As the temp. rises, the soly. of all the gases falls to a min. (at 50° for H<sub>2</sub> and 75° for the other gases), and then rises sharply. The temp. coeff. of soly. for air, O<sub>2</sub> and N<sub>2</sub> changes considerably from 0-50° and 100-240°, and very little at 50-100°. For H<sub>2</sub> this change is slight at 0-100° and considerable at 100-240°. The percentage content of atm. O<sub>2</sub> falls and that of N<sub>2</sub> rises in the soln. of air as the temp. rises, and at 240° the compn. of the mixt. in soln. is nearly that found in air. In all cases the soly. decreases as the KCl concn. rises. This effect is most marked with O<sub>2</sub>. The relations between the soly. of the different gases vary with temp. H<sub>2</sub> obeys Henry's law better than do N<sub>2</sub> and O<sub>2</sub>. H. M. Leicester</p>																									
<p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

BYKOV, M. M.

6

Synthesis of ammonium phosphates from ferrous ferric phosphates. M. M. Bykov. *Doklady Akad. Nauk S. S. R.* 40, 75-8 (1943); *Compt. rend. acad. sci. R. S. S. 60, 68-9 (1943)* (in English).—Decomposition of various Fe phosphates (vivianite, oxyhercynites, phosphorite, etc.) with aq.  $(\text{NH}_4)_2\text{S} - (\text{NH}_4)_2\text{S}_4$  soln. at 50° resulted in soln. of the phosphate radical with formation of  $\text{FeS}$  and  $\text{FeS}_2$  in easily filterable form. Various phosphates of ammonium can be crystd. from the filtrate. Recovery of by-products,  $\text{NH}_4\text{Cl}$ ,  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ , etc., is discussed briefly. Crystallographic data are given for 2 new compds. ( $\text{FeO} \cdot 4\text{Fe}_2\text{O}_3 \cdot 3\text{P}_2\text{O}_5 \cdot 3\text{H}_2\text{O}$  and  $3\text{Fe}_2\text{O}_3 \cdot 2\text{P}_2\text{O}_5$ ) and for  $(\text{NH}_4)_3\text{PO}_4 \cdot 3\text{H}_2\text{O}$ . I. W. Perry

Krasnodar Chem. Eng. Inst.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION I										SECTION II										SECTION III										SECTION IV									
IRON AND STEEL										NON-FERROUS METALS										METALLURGY										OTHER									
IRON AND STEEL										NON-FERROUS METALS										METALLURGY										OTHER									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSING AND PROPERTIES INDEX																			
BYKOV, M. M. CA																			
18																			
<p>Ammonium phosphates. M. M. Bykov, U.S.S.R.          65,184, Aug. 31, 1945. Commonly available Fe phos-          phates, such as vivianite and kertschenite, are treated          with a soln. of <math>\text{NH}_4</math> sulfide or polysulfide, and the <math>\text{FeS}_2</math>          is filtered off. M. Haseh</p>																			
ADD. ILLA METALLURGICAL LITERATURE CLASSIFICATION																			
EDOM DIVISION										EDOM DIVISION									
SECONDARY DIVISION										SECONDARY DIVISION									
TANDARD										TANDARD									

C.A. BYKOV, M.M.

Potassium orthophosphate from iron phosphates. M.M. Bykov (Voronezh Eng. Construction Inst.). *Doklady Akad. Nauk S.S.S.R.* 73, 629-31 (1950).—Vivianite, kertschenite, and oxykertschenite (of a highly variable chem. compn.), hercynite, bosphorite ( $3\text{FeO} \cdot 2\text{P}_2\text{O}_5 \cdot 17\text{H}_2\text{O}$ ), and some other minerals from White Russia, or synthetic pptd. Fe phosphates are first calcined at  $600^\circ$  for 20 min., and then digested with 6 N KOH at  $80^\circ$  and filtered from  $\text{Fe}(\text{OH})_3$ . With excess KOH, and after cooling to  $-5^\circ$ ,  $\text{K}_2\text{PO}_4 \cdot 8\text{H}_2\text{O}$  crystallizes in snow-white needles (pH of the satd. soln. 12.7), with  $n_D 1.472$ ;  $n_D 1.402$ ; 2V large, optically neg., parallel extinction. From the residual solns.,  $\text{K}_2\text{H}_2\text{P}_2\text{O}_7$  is produced by addn. of  $\text{H}_3\text{PO}_4$  at pH 4.7.  $\text{K}_2\text{PO}_4 \cdot 7\text{H}_2\text{O}$  is formed if the residual solns. from the 8-hydrate are concd. Org. material in the minerals must be removed by calcination in order to avoid the presence of sol.  $\text{Fe}^{++}$  in the solns. W. Rittel

BYKOV, M.M.

BYKOV, M.M.; KUDINOVA, L.M.

Decomposition of lead (+ 2) compounds by sulfide-bisulfide ions.

Soob.o nauch.rab.chl.VKHO no.4:43-47 '53. (MIRA 10:10)

(Lead compounds) (Sulfides)

BYKOV, M.M.

Syntheses of trisodium phosphate from iron phosphates by decomposing them in aqueous solutions of caustic soda. Soob.o nauch.rab.chl.

VKHO no.3:31-34 '54.

(MIRA 10:10)

(Sodium phosphates) (Iron phosphates) (Sodium hydroxide)



BYKOV, Mikhail Mikhaylovich; PAVLOV, Boris Ivanovich; YERMOLIN,  
I.P., red.; STEPANOVA, N.D., red.izd-va; POPOVA, V.V.,  
tekh. red.

[Economic efficiency of semiautomatic lines in lumbering  
camp landings] Ekonomicheskaya effektivnost' poluavtoma-  
ticheskikh liniy na nizhnikh skladakh lespromkhozov. Mo-  
skva, Izd-vo "Lesnaya promyshlennost'," 1963. 71 p.

(MIRA 17:3)

BYKOV, M.A.

Basic characteristics and the use of the Smith bridge. Izv.  
tekhn. no.2:38-41 F '65. (MIRA 18:6)

BYKOV, M.A.

Calibration of the Smith bridge. Izv. tekhn. no.3:35-40 Mr '65.  
(MIRA 18:5)

BYKOV, M.P.

Fully utilize the wastes of basic refractories. Metallurg no.4:25-26  
Ap '56. (MLRA 9:9)

1. Nachal'nik Gisolgneupor.  
(Refractory materials)

BYKOV, M. S.

"Study of the Removal of Sulfur From Iron Ores During Their Conditioning, Calcining, and Agglomeration." Cand Tech Sci, Ural Polytechnic Inst imeni S. K. Kirov, Min Culture USSR, Sverdlovsk, 1953. (KL, No 15, Apr 55)

SO: Sum No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

SOV/137-58-9-18309

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 12 (USSR)

AUTHOR: Bykov, M. S.

TITLE: ~~The Sintering of Sulfide~~ Concentrates With the Use of Oxygen  
(Aglomeratsiya sernistykh kontsentratsiy s primeneniye  
kislороda)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Chernaya metallurgiya, 1958,  
Nr 2, pp 10-18

ABSTRACT: The results of experiments on the sintering of sulfide concentrates of Fe ores with the drawing through of O<sub>2</sub>-enriched air are adduced. In this case, in the sintering of high-sulfide aggregates (> 4% S), not only does the degree of desulfurization increase but the sintering process is also intensified. This permits to raise the upper limit of S content of the aggregate and to obtain a low-sulfide agglomerate (0.08% S) with a lower FeO content and a smaller mechanical strength. Bibliography: 5 references.  
1. Iron ores--Processing results    2. Sulfides--Sintering    3. Sulfides--Test results  
B. S.

Card 1/1

BYKOV, M.S., kand.tekhn.nauk, dots.

Magnetic properties acquired by manganese and iron oxides following  
their simultaneous heating. Izv. vys. ucheb. zav.; chern. met. no.3:  
13-15 Mr '58. (MIRA 11:5)

1.Sibirskiy metallurgicheskiy institut.  
(Maganese ores--Magnetic properties)

BYKOV, M.S.

Sintering of magnetite concentrates containing pyrrhotine.  
Izv.vys.ucheb.sav.; chern.met. no.6:30-40 '60.  
(MIRA 13:7)

1. Sibirskiy metallurgicheskiy institut.  
(Sintering) (Iron ores)



BYKOV, M. S.

Standardizing conditions of sintering in laboratory equipment.  
Izv.vys.ucheb.zav.; Chern met. 7 no. 4:39-42 '64. (MIRA 17:5)

1. Sibirskiy metallurgicheskiy institut.

UL'YAKHIN, A.A.; GOLUBEV, R.N.; BYKOV, M.S., inzh. (Yaroslavl')

Specialization of track machinery stations. Put' i put'khoz. 8 no.8;  
27 '64. (MIRA 17:9)

1. Zamestitel' nachal'nika sluzhby puti, Yaroslavl', Severnoy dorogi  
(for Ul'yakhin). 2. Nachal'nik otdela mekhanizatsii sluzhby puti,  
Yaroslavl', Severnoy dorogi (for Golubev).

BELOUS, N.Kh., st. nauchn. sotr.; KAZANSKIY, Yu.P.; VDOVIN, V.V.;  
 KLYAROVSKIY, V.M.; KUZNETSOV, V.P.; NIKOLAYEVA, I.V.;  
 NOVOZHILOV, V.I.; SENDERZON, E.M.; AKAYEV, M.S.; BABIN,  
 A.A.; BERDNIKOV, A.P.; GORYUKHIN, Ye.Ya.; NAGORSKIY, M.P.;  
 PIVEN', N.M.; BAKANOV, G.Ye.; GEBLER, I.V.; SMOLYANINOV,  
 N.M.; SMOLYANINOVA, S.I.; YUSHIN, V.I.; D'YAKONOVA, N.D.;  
 REZAFOV, N.M.; KASHTANOV, V.A.; GOL'BERT, A.V.; SIDOROV,  
 A.P.; GARMASH, A.A.; ~~EYKOV, M.S.~~ BORODIN, L.V.; RYCHKOV,  
 L.F.; KUCHIN, M.I.; SHAKHOV, F.N., glav. red.; SHFAKOVSKAYA,  
 L.I., red.

[West Siberian iron ore basin] Zapadno-Sibirskii zhelezorud-  
 nyi bassein. Novosibirsk, Red.-izd. ot del Sibirskogo otd-  
 niia AN SSSR, 1964. 447 p. (MIRA 17:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut geo-  
 logii i geofiziki. 2. Institut geologii i geofiziki Sibirskogo  
 otdeleniya AN SSSR (for Belous, Kazanskiy, Vdovin, Klyarovskiy,  
 Kuznetsov, Nikolayeva, Novozhilov, Senderzon). 3. Institut  
 gornogo dela (for Akayev). 4. Novosibirskoye geologicheskoye  
 upravleniye Ministerstva geologii i okhrany nedr SSSR (for  
 Babin, Berdnikov, Goryukhin, Nagorskiy, Piven').

(Continued on next card)

BELOUS, N.Kh.---(continued). Card 2.

Tomskiy politekhnicheskiy institut (for Bakanov, Gebler, Smolyaninov, Smolyaninova). 5. Sibirskiy nauchno-issledovatel'skiy institut geologii, geofiziki i mineral'nogo syr'ya (for Yushin, Diyakonova, Rezapov, Kashtanov, Gol'bert). 6. Institut ekonomiki sel'skogo khozyaystva (for Garmash). 7. Sibirskiy metallurgicheskiy institut (for Bykov, Borodin, Rychkov). 8. Tomskiy inzhenerno-stroitel'nyy institut (for Kuchin). 9. Chlen-korrespondent AN SSSR (for Shakhov).